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THE UNSPOKEN PSYCHOLOGICAL ISSUES WITH LESSON HORSES AND HOW WE NEED TO ADDRESS THEM

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THE UNSPOKEN PSYCHOLOGICAL ISSUES WITH LESSON HORSES AND HOW WE NEED TO ADDRESS THEM

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Abstract

Every day all over the world horses provide much needed therapy and treatment to people in need. They provide physical, emotional, and mental training and healing. Humans depend on them for so much and we have a moral and ethical obligation to be good stewards of our equine companions. This close proximity can take a toll on horses physically and psychologically even in the realm of experienced equine professionals. So many times though it is the small lesson facility that sees hundreds of people each year and makes a profound difference in people's lives. This can be at a 4-H camp, a rodeo club, a therapeutic riding facility, or any one of a million different small facilities all over the US. These type facilities are not known for their impressive budgets but for the passion of their workers. Many times the staff at these facilities are volunteers, or young part time workers who do not have a great deal of experience and can work for a lower wage. On the flip side, the horses at these facilities are often there till they are considered too old or their habits too much of an issue for them to continue. The need to care for the wellbeing of these horses is great but the question is how we can do that with typically less experienced and younger staff that may only be at a facility for a few years. Often these horses develop behavioral issues that can be dangerous or cause them to be unusable for a program. What can we do to change that? Knowing that this needs to be an economical approach that has to be time aware any viable solution would have to be short and affordable to implement. A SDA youth camp in Tennessee was used as an example of small equine lesson facilities. An MWDS survey was used to try to understand the staff's perception of their knowledge, abilities, and where they needed further training to make their programs run more smoothly for themselves and the horses. A small group of equine professionals was used as observers to make comments and help

understand the facility's capabilities, not only from the staff's perspective. Some of the answers pointed to more specific training in basic horse husbandry, while others indicated things like overall situational awareness and self-confidence were needed the most. The purpose being that if we could address some of the needs and shortcomings of the staff, then they could better care for and understand the needs of the horses in their programs. This could extend the life and usefulness of these horses, as well as, enriching their quality of life on a daily basis. There were some issues in compliance and maturity but overall the observers were impressed with the ability and passion of the staff in the study. The camp director has requested a copy of the study when it is done and wants to discuss how the findings can improve their program. This sets the probability of recommendation compliance fairly high. Hopefully with this just being the beginning, future studies can expand to larger numbers of facilities and increased understanding can help with training and direct programs to be more efficient. All of this can hopefully lead to healthier and better understood horses and programs that are better equipped to teach and provide equine therapy.

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Chapter 1

Introduction

Introduction

"There is something about the outside of a horse that is good for the inside of a man"; this is a phrase that is often repeated in realms of equitation. It has been attributed to no lesser persons than Ronald Reagan, Winston S. Churchill, Lord Palmerston, and many more throughout history (Potter, 2013). Francesco Perrotta's thesis on the benefits of equine therapeutics discussed many of the social and developmental aspects of a good riding experience on a variety of demographics. Be it during early developmental years or later in life, there are innumerable benefits physically, mentally, and emotionally to hippotherapy. "…a *good ride* is good for everyone, from children to old and may be useful to improve conditions such as listlessness, decreased mood, vague anxiety, psychasthenia, and neurotic insights." (Perrotta, 2012, p.17). She goes on to list many of the benefits and specific conditions that equine interactions can improve. One of the aspects that can be overlooked would be the "good" equine experience. It creates quite the contrast when you consider what a "not so good" encounter with an intelligent, 1,200lbs., prey animal that is quicker and stronger than any human might be like.

Therapeutic riding and Hippotherapy notwithstanding, even basic riding lessons cannot be emphasized enough as a developmental and training tool for children or anyone looking to enhance their awareness of self, the world around them, and relationships in general. But how does this affect the horses that are used? According to Alison Selby, organizations like the EFMHA (Equine-Facilitated Mental Health Association) study and standardize the health benefits of the human-equine relationship. Though due to the qualitative nature of such data it is difficult to develop standardized measures on the effects on human or horse (Selby, 2009). There are far fewer studies on the psychological effects on the horses themselves though it is often discuss.

Kartini Abd Ghan wrote a thesis on not only equine psychological problems in riding horses, but specifically our ability to judge and diagnose such problems. It highlights ways people can assess behaviors and cues in horses that would indicate there is a problem. She also highlights many of the ways that riders, handlers, other horses, and the environment along with other influences can cause a horse distress. This causes stress and danger to everyone involved. It can also cause many financial issues and even a need to replace horses in a program (Ghan, 1997). Even with all of this the fact still remains that study after study shows the potential negative psychological effects played out on lesson horses. Despite the personal and financial concerns there is a strong inherent ethical responsibility to lessen the psychological damage to these horses and even try to prevent or correct what we can (Cregier, 1987)

Statement of the Problem

Lesson horses tend to have a short shelf life. With all the different stressors put on them by riders, handlers, and the many aspects of their environment they tend to develop negative behaviors faster than horses in other disciplines. This often leads to a number of negative effects till they are eventually sold or retired and many times these malbehaviors stay with them the rest of their lives. Many times the misunderstanding caused by this leads to a variety of neglect and abuse which just expounds the problem even further. This is an ethical problem. It is detrimental to the horse and to the people who have bad experiences or miss the chance at the tremendous physical, mental, and emotional benefits of a good equine encounter.

Purpose of the Study

The purpose of this study is to use a focused group and previously collected data to determine some of the causes of these behavioral problems and possible ways that they can be corrected or prevented in the future. There is much misconception as to the cause of some of these issues even in the professional world. Many times camp programs, lesson programs, and riding schools have more lay or non-professional workers than experts. There needs to be a way to self-identify issues being perpetuated, warning signs, and misbehavior for what it is. Using and interpreting data from this study, a solution will be sought that the average equine worker can implement to the benefit of horses, riders, and staff.

Research Questions/Hypotheses

The original thought that caused the questions was, “Lesson horses become confused, develop bad habits, and begin having negative attitudes”. What could cause this? How can equine programs reassure, stabilize, prevent mental degradation, and keep lesson horses mentally healthy in an unstable environment? This just spawned many other questions. What about the curriculum or environment causes these problems? Where does it begin? How are lesson horses different from other horses? What can be done to make them healthier or extend the amount of time they are useful and functional? Needless to say there are many questions that are prevalent to this study but they were narrowed down to a few:

- What are some of the signs of malbehavior or identifiers of the behaviors themselves?
- What are the causes of these behaviors?
- What can be done to correct these behaviors?
- What can be done to prevent them from even starting?
- How can these be implemented by lay personnel?

These questions and the data that they generate can help us to identify the psychological or physical causes of the problem. The root of these problems can often be laid at the feet of the humans in charge of the program. The focus of this particular study is on the human awareness and ability in the causation and effect of certain physical and psychological stimuli. Once the identifiers have been ascertained a plan to implement new techniques in educating staff or riders can be devised. If the study proves viable this

could lead to improved mental health and usability in lesson horses which can, intern, lead to better experiences by the people as well.

Assumptions

One has to assume certain factors to narrow the study down into manageable components. There needs to be an assumption of similarity or at least grouping in the causes or instigators of certain equine behavioral problems. One must assume that many small barn setups have a similar setup to their lesson structure. The assumption is that programs want to prolong the usefulness of their horses, keep people safe, and act in an ethical manner towards the horses. The reports of different horse personnel will be assumed factual and that data has been provided honestly and not to skew views of different programs. The accreditations of most facilities are similar. Though there are official differences in certification programs that small facilities use, they will need to be assumed to have an overall similarity. CHA (Certified Horsemanship Association), EMW (Equine Management workshop), and HSA (Horsemanship Safety Association) are just a few of the organizations that certify these horse programs but they all seek to rank the ability of the staff and regulate the procedures and environment of the facility.

Definition of Terms

Malbehavior - Undesirable and aberrant behavior.

Therapeutic Riding – An equine-assisted activity for the purpose of contributing positively to the cognitive, physical, emotional and social well-being of an individual.

Hippotherapy – interaction with or specifically riding horses as a therapeutic or rehabilitative treatment, especially as a means of improving coordination, balance, and strength. Over seen by a professional and many times the rider is not controlling the horse. One or more handlers on the ground are walking with the horse. Hippo (Greek for horse) + therapy.

Equitation – the art and practice of horsemanship and horse riding.

Lesson Horse – A horse used for lessons in riding, driving, or on the ground. (Perrotta, 2012)

Limitations

The focal group will be a 16 horse riding facility in a summer camp program in central Tennessee. There will be six staff between the ages of 16 and 22 directly working with the horses; an average of 12 students per one hour period four times a day, five days a week and 9 weeks out of the summer. The horses in this study are boarded over the winter in KY and shipped back to the camp in TN towards the end of May. There is a week of just interacting with the staff then one week of Camp Phoenix, a burn victim group. The next week of riders will be blind with a wide age range. They will then be exposed to children 7-9 years of age for one week. After that each week will be a progressively older group till the end of the summer where they will be used for a family camp and finally a 50+ camp (campers are 50yrs of age or older) before the horses are shipped back to KY for the off season. At this time data will be compiled and analyzed.

Significance of the Study

This study can potentially lengthen and enrich usage time for lesson horses. Beyond the ethical need to have a higher standard of care for these intelligent animals in our care, there is an opportunity to magnify the benefit of these programs. Therapeutics relies on the bond and interaction with these horses so it is inherent that their mental health and behavior will greatly affect the experience. The focus of summer camp horse programs to use as developmental tools for eager young minds can be greatly expounded. A large portion of the negative variable of the interaction with lesson and school horses can be lessened if the causative factor for negative behavior can be dealt with. So often you hear someone's nightmare horse story as a reason they will never ride again. What if you could give them a positive riding experience that will shape the rest of their life instead? The groundwork has already been laid out for analysis of symptoms and behavior. Accidents can be avoided and a much better learning and therapy environment can be achieved once a solid plan of action is put into effect.

Chapter Summary

There is a rich history of the developmental relationship between horse and man. Over thousands of years the symbiotic relationship between these two species has yielded new insight into many different seemingly unrelated aspects of each other's lives. The therapeutic uses of horses and the riding schools that are used to train and educate all ages of people are of a far greater use than most realize. That said, there can be a negative aspect to these programs; the stresses that are put on these horses can cause

many different behavior problems for the horses. This, in turn, affects their usefulness in the very same programs. This study is intended to use small facility horses to better understand the causative agents in this and then come up with a solid plan that even lay people can use to improve the mental and physical health of lesson horses. This should also cause a substantial rise in their longevity in these programs and the quality of their use.

Chapter 2

Review of Relevant Literature

Introduction

The purpose of this chapter is to present a review of the related literature for this research study. This review will emphasize and expound upon the need, potential benefits, and approaches to analyzing equine behavior and their interaction with humans. This is a wide field with many past studies that can relate to the focused topic of small facility lesson horses. In the interest of supporting this, the review has been divided into the following sections: (1) Introduction; (2 Equine Behavior and Human Interaction; (3) Therapeutic Riding and Hippotherapy; (4) Small Facility Lesson Horses; (5) Related Behavioral and Education Issues; (6) Summary.

Equine Behavior and Human Interaction

Horses and man have a long and varied history. They have been used for meat, milk, transportation, agriculture, sport, and many other purposes but more and more they are used for leisure and companionship in modern times. Humans have often used the great strength and speed of equines to further their physical endeavors, but in doing so, have exposed the tremendous impact horses have on man's psyche. Their ability to render aide and treatment to our problems, to act as teachers, and as an honest companion

often outshines their original uses (Hausberger, 2008). As much as horses affect humans, in a true emotionally symbiotic relationship, humans affect all aspects of a horse's life as well.

Being a domesticated animal that has such a high level of interaction with man, the level of significance played in all aspects of a horses life causes ripples even when humans are not involved. Horses definitely "bring their work home with them". Whether a coal pony or a lesson horse the many influences of man causes emotional and behavioral issues within the herd structure and between individual horses (Fureix, 2009). Environment, housing, nutrition, herd mates or companions, levels of activity, light exposure or coverage, and medication are just some of the non-human influences that are still controlled by humans. Not only those, but there are so many different types of human interaction. Short term vs. long term, occasional vs. every day, professional vs. nonprofessional all have different levels and influence. Each forms their own type of bond and influences with each other. One of the main similarities is that they all have their own interspecies communication issues (Hausberger, 2008).

Therapeutic Riding and Hippotherapy

The early Greeks used horseback rides to raise the spirits of those that suffered from chronic disease. Hippocrates is quoted in reference to "riding's healing rhythm" (Lessick, 2004). There is a plethora of resources and varying opinions on equine therapy. New terms and styles are being developed and implemented every day. The effectiveness of different equine treatments on disease be it physical, mental, or emotionally is only limited by the knowledge and ability of the instructor. Therapeutic riding is any activity

using a horse to treat physical, mental, cognitive, social, or behavioral problems. The degree of training or treatment can break this down into different subcategories. Classic Hippotherapy is based off a German model that is purely about the horse's movement and the rider's response to it. In this type, the rider has no control but is just using the horse's movement as treatment. More modern hippotherapy, though based on the classic hippotherapy model, is more complex and employs other activities and interactions with the horse and the environment. Many of the differences deal with the training of the therapist/person in charge, the state of the riding, or intent of the session (Heine, 1997). That is not near the limit of treatment benefits to man but rather a small sampling. Psychotherapy is an ever expanding field in equine therapy that closely intertwines with many of the other therapies. Equine-facilitated psychotherapy (EFP) accentuates the ability of the horse to highlight the need to send congruent messages with spoken and body language. It highlights the communication aspect of therapy. It is extremely effective in individual or group sessions with youth needing behavior modifications and motivation; many times fostering a greater desire to cooperate than with human therapists alone. Though the distinguishing factor from hippotherapy is that it focuses on the psychological aspects of equine interaction with the patient rather than the physical side (Vidrine, 2002).

Small Facility Lesson Horses

Lesson horses are used in many small facilities that adhere to their own rules and regulations as well. There are a great many certification clinics or overview organizations depending on the type of facility involved. Many of them are only accreditation groups that are only in contact with a given facility annually or up to once

every five years. These groups oversee a vast array of facilities that range from private lesson barns, camps, social clubs, church organizations, and schools. But even with all the safety procedures and overview organizations there is a serious concern with the deficit in knowledge, skill, and practices of instructors and operators. This problem has an exponential effect as they pass this on to students and clients (Barger, 2009).

This can cause serious issues with horse husbandry as well. When the person in charge of the facility may miss issues, it trickles down through all the staff and clients. Most of these clinics and certification are focused on staff and rider safety. The horses are also a concern but in-depth assessment is usually beyond the staff involved with only gross issues noted and dealt with. The subjective judgement of observed behaviors in these instances are usually too little and too late when it comes to any kind of preventative treatment for the horses. That makes this a huge area that remains unaddressed in safety and soundness not only for the horses but humans involved as well. There is a great need for equine professionals and lay workers to be able to identify more of the many subtle issues that pervade an equine facility. These issues can contribute to numerous problems with performance, health, and behavioral problems. There is a great deal of debate surrounding the different training methods and class structures in regards to the stress they cause mentally and physically to horses. There is a need for studies to determine the best method of interpretation of behavioral signs. There is a profound need for consistency and understanding across professional disciplines and recreational use (Hall, 2014).

Related Behavioral and Education Issues

Kartini Abd Ghani did her entire thesis on Human judgement in diagnosing problem behavior in horses using knowledge-based system applications. She stated that humans use judgement every moment of their lives but she goes on to show how using different models and references for judgement can lead to varying results. Using standardized measures, like the Brunswick Lens Model, she analyzed owners' and handlers' ability to identify equine behavioral issues (Ghani, 2004). Her results showed a need for education and consistency of interpretation methods. Cooper and Albentosa focused on behavioral adaptations in horses and the roles their responses play in their interaction with humans. They highlighted the difference between their responses in a natural habitat and those in their domestic one. This emphasized their adaptability and the correlation to their natural instincts with a domesticated environment. Many times their seemingly abnormal behavior made sense if properly interpreted and observed. This includes responses to potential predation, social or herd needs, and other basic interactions incorporated in their daily routine that people overlook (Cooper, 2005).

Chapter Summary

The horse has always had a drastic influence on man. Things as simple as the introduction of the horse into a society have changed the very core of man's existence. The horse has stimulated a complete change in travel, agriculture, warfare, communication, and many other aspects of human society. This has not left the horse unchanged. Man has altered every aspect of equine life. Like with any close relationship there are unending examples of successes and failures, help and harm, though it isn't

exactly an even trade off. Man tends to focus on negating the harm and reaping the most benefit from an equine relationship. In a sense of stewardship and moral obligation there is usually an attempt to care for the horse as well even if out of a desire to garner further use. But often the horse is the silent partner that soaks up the lion's share of any negatives in his relationship with man. Many studies have been done on the aspects of domestic horses' involvement with humans. Time and time again there is shown a need for better understanding. With a better and more consistent understanding we can educate and set standards that will improve the quality of equine experiences for human and horse. The behavioral issues and "accidents" that could be anticipated and prevented will enrich current experiences, expand possibilities for new ones, and extend the useful time a horse can be used in the therapy or lesson setting. There is a need to be filled and previous studies have paved the way for the next step. That step is the study, analysis, interpretation, and implementation of behavioral observation and better protocols for the future of the horse industry.

Chapter 3

Methodology

Introduction

This chapter focuses on the pertinent information in regards to the methodology of this study. This outlines the basis of the approach used for gathering data on the ability, knowledge and self awareness possessed by the horse staff. The methodology is divided as follows: Introduction, Design, Research Questions and Hypothesis, Variables, Population, Instrument Selection, Data Collection Methods, Data Analysis, Reliability, Budget and Time Schedule, Advantages and Disadvantages of Strategy and Methods.

Design

The study will use Mean Weighted Dependency Score (MWDS) to gauge the understanding of the horse staff in regards to their skill at interpreting the behavioral cues and the importance of those observations. This will be done using Likert items, surveys, and observation of the horses and staff at intervals throughout a 12 week summer camp setting. This will allow for not only observational data from a professional equine consultant using industry standard without interfering with the program, but also the personal observation by the participants of this study. Once the data is gathered the MWDS scores will be compared to outside observation of both the horses and the staff to ascertain the levels of communication and understanding between species. This will also

be used to pinpoint problem areas causing aberrant behavior in the horses and potential protocol to rectify them.

Research Questions/Objective

The primary questions of what causes bad habits and bad behavior in horses along with how these problems can be fixed is based on interaction and communication. What is the first step? Realizing there is a problem and then finding its origin is the logical beginning. The study has to first ascertain the source of the problem and if the average horse worker can be taught to recognize the issue and act accordingly. There are many subsequent issues of training time, funding, and availability that make efficiency and simplicity in the final answer necessary. So this study must identify the causative agents by determining staff understanding, through cues from the horses, and formulating curative protocols for the causative factors for the horses along with education for staff.

Variables

The independent variables in this study are past problems, the horses' behavioral cues and how staff read those cues, staff awareness, and the causes of those problems. These are the things we are trying to measure, categorize, and identify. The analysis of these things will allow for potential solutions and new education and protocol. The dependent variable in this study will primarily be the MWDS forms coupled with intermittent observation by the researcher at preset times throughout the summer. The results of the MWDS and contrast of observations at the first of the summer compared to the end will be what are being measured and will depend upon environment and

interactions of the participants throughout the summer and are thus the dependent variables.

There are some potential moderating variables like the staff or horses' level of education, experience, or past jobs but by vetting the staff and reviewing the horses' history the majority of the unforeseen effect can be negated. The primary mediating variable possible would be individual relationships between the staff or horses. This will be avoided by emphasizing the need to treat all staff and horses equally and for participants not to play favorites.

Instrument Selection

Mean Weighted Discrepancy Scores (MWDS) will be one of the primary tools used along with Likert and Likert like data analysis to monitor problems with the horses, their cues, and the staffs' perception of these issues. The version of MWDS in this study contains a thirty questions that are rated 1-5 on importance and 1-5 on ability level to assess the staffs' observations and perception. This along with comments, study of past data, and observations will be used to analyze what causes these problem. This will then be used to postulate corrective education and procedures in the future.

Data Collection Methods

At the first of the summer, all of the horse staff will be given the survey to fill out based on importance and ability. An overall observation of their ability and performance along with observational data will be documented. At the end of the summer session the staff will be given the surveys to complete again along with one last round of observational data collected by the researcher on the staff and horses.

Data Analysis

The frequency, percent, measures of central tendency, and variability will be calculated as well as the MDWS for the survey answers. Comparing the rank of each importance vs ability question will indicate areas needing more focus in education for the staff. The observational data on staff and horses will help indicate the way in which education or protocol will most efficiently be altered. Comparing past data will indicate useful changes vs. nonproductive differences.

Reliability/Validity

Part of the internal validity will be the number of staff that participates in the MWDS and survey questions. A MWDS is a simple mathematical tool that uses two paired Likert items to enable assessment of the necessity to train our employees in a given skill or to address an equine malbehavior. Mean Weighted Discrepancy Scores are frequently used to render a numeric value to prioritize areas of need or concern. To calculate a MWDS for each respondent, subtract the ability score from the importance score (Importance-Ability) then multiply by (mean importance) for each competency and calculate the average of those numbers. This gives you the MWDS for each question set. A neutral MWDS score balances importance vs. competence and is thus adequate. The higher the MWDS score the greater the discrepancy between importance and competence with a deficit in competence compared to a high importance value. A negative MWDS rank indicates that there is a higher competency than importance. This works for the severity vs frequency aspect of the equine questions as well. (Garton, 1996)

The pretest vs the posttest, each with an assessment of horse and staff, adds reliability and reference. Part of the constant is the ACA (American Camping Association) accreditation that all of the camps involved follow along with the fact that each one requires some form of certification by a recognized equine association for all or at least a representative of their horse staff. This ensures similar lesson settings. Also the use of preexisting standards by recognized horse training programs like the Certified Horsemanship Association that are used for safety and reference in this study contribute to the universal reliability.

Budget and Time Schedule

The budget for this study is based almost entirely on the time and effort put in by the researcher. As the equine consultant for this youth camps, access is free and compliance is high for any time or effort needed by the horses or staff involved. Some small expenses for paper, printing, and writing materials will be involved along with travel expenses that can be somewhat negated by prescheduled consultation trips paid for by the camp. The biggest issue with budget is the extremely limited resources most of the small facilities involved or represented have access to. This makes the intrinsic need for a speedy, low cost, and efficient solution or recommendation as a result of the study necessary for any expectation of implementation. The time of the study will run over a 12 week period. With a month prior for preparation and a month after for analysis; the entire study will take approximately 5-6 months and cost less than $500.

Advantages and Disadvantages of Strategy and Methods

Some of the primary advantages of this strategy are the access to the riding programs by the researcher and the similarity between youth camp programs allowing for an adequate representation of the outside population. This is something that is a serious issue with these small facilities so there is a high willingness to participate and support the research. Some of the disadvantages lie in the potential unforeseen variables, and funding for potential solutions and protocols.

Chapter 4

Results

Introduction

There are about fifteen questions or statements in the survey of primary importance. The rest of the questions were of lesser gradients of importance so that results wouldn't be skewed by the participants assuming that all of the questions were a "5" or "very important". The questions were formed into the catagories of "behavior", "tack/grooming", "nutrition", and "other". They were then mixed at random. Most of these are set up as comments or issues so they can be more easily rated on importance and ability in a quick survey format. The results are also set up in a pre and post summer format.

The Questions/Statements

Question 1. *Ride camp horses outside of a camp setting.*

Pre-Summer results were:

Mean importance= 3.33, mean ability= 3.67, MWDS score= -1.11, rank importance= 22, rank ability= 7, rank MWDS= 26

Post-Summer results were:

Mean importance= 3.60, mean ability= 3.00, MWDS score= 2.16, rank importance= 19, rank ability= 21, rank MWDS= 15

Question 2. *Have one set color of tack/equipment.*

Pre-Summer results were:

Mean importance= 1.83, mean ability= 2.83, MWDS score= -1.83, rank importance= 30, rank ability= 22, rank MWDS= 28

Post-Summer results were:

Mean importance= 1.8, mean ability= 3.00, MWDS score= -2.16, rank importance= 26, rank ability= 21, rank MWDS= 29

Question 3. *Identification and knowledge of behavioral modifiers in the environment.*

Pre-Summer results were:

Mean importance= 4.67, mean ability= 3.33, MWDS score= 6.22, rank importance= 9, rank ability= 13, rank MWDS= 9

Post-Summer results were:

Mean importance= 4.20, mean ability= 4.00, MWDS score= 0.84, rank importance= 15, rank ability= 3, rank MWDS= 20

Question 4. *Ride non-camp horse outside of camp timeframe.*

Pre-Summer results were:

Mean importance= 4.00, mean ability= 3.50, MWDS score= 2.00, rank importance= 18, rank ability= 9, rank MWDS= 18

Post-Summer results were:

Mean importance= 3.75, mean ability= 3.25, MWDS score= 1.88, rank importance= 18, rank ability= 20, rank MWDS= 16

Question 5. *Have daily routine for staff.*

Pre-Summer results were:

Mean importance= 4.50, mean ability= 4.33, MWDS score= 0.75, rank importance= 11, rank ability= 1, rank MWDS= 23

Post-Summer results were:

Mean importance= 4.40, mean ability= 4.00, MWDS score= 1.76, rank importance= 10, rank ability= 3, rank MWDS= 17

Question 6. *Know/used one brand of saddle/tack.*

Pre-Summer results were:

Mean importance= 2.00, mean ability= 2.67, MWDS score= -1.33, rank importance= 28, rank ability= 26, rank MWDS= 27

Post-Summer results were:

Mean importance= 2.20, mean ability= 2.40, MWDS score= -0.44, rank importance= 25, rank ability= 24, rank MWDS= 24

Question 7. *Personally float horses' teeth.*

Pre-Summer results were:

Mean importance= 2.83, mean ability= 1.67, MWDS score= 3.31, rank importance= 24, rank ability= 29, rank MWDS= 15

Post-Summer results were:

Mean importance= 2.80, mean ability= 1.40, MWDS score= 3.92, rank importance= 23, rank ability= 29, rank MWDS= 8

Question 8. *Own a horse of your own.*

Pre-Summer results were:

Mean importance= 2.67, mean ability= 2.17, MWDS score= 1.33, rank importance= 26, rank ability= 28, rank MWDS= 20

Post-Summer results were:

Mean importance= 3.00, mean ability= 3.00, MWDS score= 0.00, rank importance= 22, rank ability= 21, rank MWDS= 22

Question 9. *Have daily routine for the horses.*

Pre-Summer results were:

Mean importance= 4.17, mean ability= 4.33, MWDS score= -0.69, rank importance= 15, rank ability= 1, rank MWDS= 25

Post-Summer results were:

Mean importance= 4.40, mean ability= 4.40, MWDS score= 0.00, rank importance= 10, rank ability= 1, rank MWDS= 23

Question 10. *Teach all styles of riding during camp.*

Pre-Summer results were:

Mean importance= 3.50, mean ability= 3.17, MWDS score= 1.17, rank importance= 20, rank ability= 16, rank MWDS= 21

Post-Summer results were:

Mean importance= 2.80, mean ability= 2.40, MWDS score= 1.12, rank importance= 23, rank ability= 24, rank MWDS= 19

Question 11. *Know/feed only one brand of feed.*

Pre-Summer results were:

Mean importance= 3.00, mean ability= 3.67, MWDS score= -2.00, rank importance= 23, rank ability= 7, rank MWDS= 29

Post-Summer results were:

Mean importance= 2.40, mean ability= 4.00, MWDS score= -3.84, rank importance= 25, rank ability= 3, rank MWDS= 30

Question 12. *Know the different horse coat colors.*

Pre-Summer results were:

Mean importance= 2.83, mean ability= 2.50, MWDS score= 0.94, rank importance= 24, rank ability= 27, rank MWDS= 22

Post-Summer results were:

Mean importance= 2.40, mean ability= 2.80, MWDS score= -0.96, rank importance= 25, rank ability= 24, rank MWDS= 27

Question 13. *Assess placement of each horse within the herd.*

Pre-Summer results were:

Mean importance= 4.33, mean ability= 2.83, MWDS score= 6.50, rank importance= 13, rank ability= 22, rank MWDS= 6

Post-Summer results were:

Mean importance= 4.40, mean ability= 3.60, MWDS score= 3.52, rank importance= 10, rank ability= 11, rank MWDS= 11

Question 14. *Ride/work horses every day in a teaching environment.*

Pre-Summer results were:

Mean importance= 4.17, mean ability= 3.83, MWDS score= 1.39, rank importance= 15, rank ability= 3, rank MWDS= 19

Post-Summer results were:

Mean importance= 4.00, mean ability= 3.60, MWDS score= 1.6, rank importance= 17, rank ability= 11, rank MWDS= 18

Question 15. *Express knowledge and understanding of individual horse's tack needs based on terrain and/or activity.*

Pre-Summer results were:

Mean importance= 4.67, mean ability= 3.00, MWDS score= 7.78, rank importance= 9, rank ability= 19, rank MWDS= 4

Post-Summer results were:

Mean importance= 4.60, mean ability= 3.80, MWDS score= 3.68, rank importance= 6, rank ability= 8, rank MWDS= 10

Question 16. *Identification and knowledge of toxins in the environment.*

Pre-Summer results were:

Mean importance= 5.00, mean ability= 2.67, MWDS score= 11.67, rank importance= 1, rank ability= 25, rank MWDS= 1

Post-Summer results were:

Mean importance= 4.80, mean ability= 2.80, MWDS score= 9.60, rank importance= 1, rank ability= 24, rank MWDS= 1

Question 17. *Have certification in hippotherapy.*

Pre-Summer results were:

Mean importance= 2.50, mean ability= 1.17, MWDS score= 3.33, rank importance= 27, rank ability= 30, rank MWDS= 14

Post-Summer results were:

Mean importance= 2.40, mean ability= 1.40, MWDS score= 2.40, rank importance= 25, rank ability= 29, rank MWDS= 14

Question 18. *Match horse and rider personality.*

Pre-Summer results were:

Mean importance= 3.67, mean ability= 3.00, MWDS score= 2.44, rank importance= 19, rank ability= 19, rank MWDS= 17

Post-Summer results were:

Mean importance= 3.60, mean ability= 3.80, MWDS score= -0.72, rank importance= 19, rank ability= 8, rank MWDS= 25

Question 19. *Have horses stalled at night.*

Pre-Summer results were:

Mean importance= 1.83, mean ability= 3.50, MWDS score= -3.06, rank importance= 29, rank ability= 9, rank MWDS= 30

Post-Summer results were:

Mean importance= 1.60, mean ability= 2.80, MWDS score= 1.92, rank importance= 27, rank ability= 24, rank MWDS= 28

Question 20. *Demonstrate appropriate grooming techiques.*

Pre-Summer results were:

Mean importance= 4.50, mean ability= 3.83, MWDS score= 3.00, rank importance= 11, rank ability= 3, rank MWDS= 16

Post-Summer results were:

Mean importance= 4.20, mean ability= 4.40, MWDS score= -0.84, rank importance= 15, rank ability= 1, rank MWDS= 26

Question 21. *Assess nutritional need of individual horses.*

Pre-Summer results were:

Mean importance= 5.00, mean ability= 3.17, MWDS score= 9.17, rank importance= 1, rank ability= 16, rank MWDS= 3

Post-Summer results were:

Mean importance= 4.80, mean ability= 3.60, MWDS score= 5.76, rank importance= 1, rank ability= 11, rank MWDS= 3

Question 22. *Be a certified riding instructor.*

Pre-Summer results were:

Mean importance= 3.17, mean ability= 3.17, MWDS score= 0.00, rank importance= 21, rank ability= 16, rank MWDS= 24

Post-Summer results were:

Mean importance= 3.60, mean ability= 3.40, MWDS score= 0.72, rank importance= 19, rank ability= 16, rank MWDS= 21

Question 23. *Assess equine body language in regards to communication.*

Pre-Summer results were:

Mean importance= 4.33, mean ability= 3.00, MWDS score= 5.78, rank importance= 13, rank ability= 19, rank MWDS= 10

Post-Summer results were:

Mean importance= 4.40, mean ability= 3.40, MWDS score= 4.40, rank importance= 10, rank ability= 16, rank MWDS= 7

Question 24. *Demonstrate situational awareness or the ability to know all that is going on around you.*

Pre-Summer results were:

Mean importance= 4.83, mean ability= 3.50, MWDS score= 6.44, rank importance= 3, rank ability= 9, rank MWDS= 8

Post-Summer results were:

Mean importance= 4.60, mean ability= 3.40, MWDS score= 5.52, rank importance= 6, rank ability= 16, rank MWDS= 5

Question 25. *Assess bit and bridle fit.*

Pre-Summer results were:

Mean importance= 4.83, mean ability= 3.83, MWDS score= 4.83, rank importance= 3, rank ability= 3, rank MWDS= 12

Post-Summer results were:

Mean importance= 4.60, mean ability= 4.00, MWDS score= 2.76, rank importance= 6, rank ability= 3, rank MWDS= 12

Question 26. *Accurately assess hydration of equine.*

Pre-Summer results were:

Mean importance= 4.83, mean ability= 3.33, MWDS score= 7.25, rank importance= 3, rank ability= 13, rank MWDS= 5

Post-Summer results were:

Mean importance= 4.80, mean ability= 3.60, MWDS score= 5.76, rank importance= 1, rank ability= 11, rank MWDS= 4

Question 27. *Assess human body language and how it affects equine behavior.*

Pre-Summer results were:

Mean importance= 4.17, mean ability= 3.33, MWDS score= 3.47, rank importance= 15, rank ability= 13, rank MWDS= 13

Post-Summer results were:

Mean importance= 4.40, mean ability= 3.80, MWDS score= 2.64, rank importance= 10, rank ability= 8, rank MWDS= 13

Question 28. *Distinguish the difference between a fear response and an aggressive response.*

Pre-Summer results were:

Mean importance= 4.83, mean ability= 3.50, MWDS score= 6.44, rank importance= 3, rank ability= 9, rank MWDS= 8

Post-Summer results were:

Mean importance= 4.60, mean ability= 3.60, MWDS score= 4.60, rank importance= 6, rank ability= 11, rank MWDS= 6

Question 29. *Assess saddle fit and identify points of pressue and friction.*

Pre-Summer results were:

Mean importance= 4.83, mean ability= 3.83, MWDS score= 4.43, rank importance= 3, rank ability= 3, rank MWDS= 12

Post-Summer results were:

Mean importance= 4.8, mean ability= 4.00, MWDS score= 3.84, rank importance= 1, rank ability= 3, rank MWDS= 9

Question 30. *Distinguish pain response from other behaviors or lack thereof.*

Pre-Summer results were:

Mean importance= 4.83, mean ability= 2.83, MWDS score= 9.67, rank importance= 3, rank ability= 22, rank MWDS= 2

Post-Summer results were:

Mean importance= 4.80, mean ability= 3.40, MWDS score= 6.72, rank importance= 1, rank ability= 16, rank MWDS= 2

Table 1

Pre-summer MWDS Rank

Rank	Question	MWDS	Importance Rank	Ability Rank	*n*
1	16	11.67	1	25	6
2	30	9.67	3	22	6
3	21	9.17	1	16	6
4	15	7.78	9	19	6
5	26	7.25	3	13	6
6	13	6.5	13	22	6
7	24	6.44	3	9	6
8	28	6.44	3	9	6
9	3	6.22	9	13	6
10	23	5.78	13	19	6
11	25	4.83	3	3	6
12	29	4.83	3	3	6
13	27	3.47	15	13	6
14	17	3.33	27	30	6
15	7	3.31	24	29	6
16	20	3.00	11	3	6
17	18	2.44	19	19	6
18	4	2.00	18	9	6
19	14	1.39	15	3	6
20	8	1.33	26	28	6
21	10	1.17	20	16	6
22	12	0.94	24	27	6
23	5	0.75	11	1	6
24	22	0.00	21	16	6
25	9	-.069	15	1	6
26	1	.1.11	22	7	6
27	6	-1.33	28	26	6
28	2	-1.83	30	22	6
29	11	-2.00	23	7	6
30	19	-3.06	29	9	6

Table 2

Post-summer MWDS Rank

Rank	Question	MWDS	Importance Rank	Ability Rank	*n*
1	16	9.6	1	24	6
2	30	6.72	1	16	6
3	21	5.76	1	11	6
4	26	5.76	1	11	6
5	24	5.52	6	16	6
6	28	4.6	6	11	6
7	26	4.4	10	16	6
8	7	3.92	23	29	6
9	29	3.84	1	3	6
10	15	3.68	6	8	6
11	13	3.52	10	11	6
12	25	2.76	6	3	6
13	27	2.64	10	8	6
14	17	2.4	25	29	6
15	1	2.16	19	21	6
16	4	1.88	18	20	6
17	5	1.76	10	3	6
18	14	1.6	17	11	6
19	10	1.12	23	24	6
20	3	0.84	15	3	6
21	22	0.72	19	16	6
22	8	0.00	22	21	6
23	9	0.00	10	1	6
24	6	-0.44	25	24	6
25	18	-0.72	19	8	6
26	20	-0.84	15	1	6
27	12	-0.96	25	24	6
28	19	-01.92	27	24	6
29	2	-2.16	26	21	6
30	11	-3.84	25	3	6

There are frequency and percentage charts in the appendix that can be referenced.

Observer/Equine Professional Input

There were a variety of comments and observations from the equine professionals that observed the summer camp staff while they worked with the horses. All of them noted

that the staff were good with the children but needed to work on self esteem and confidence in themselves and being able to project that confidence to the students and the horses. They all also noted that the staff needs to be more aware of their surroundings. The one safety issue that they all commented on was that reins should never be used to tie a horse to a fence or post.

Chapter 5

Conclusions and Recommendations

Introduction

Data gathered in this study gave insight into the perceived level of knowledge and ability held by ICC's summer camp horse program staff. The MWDS format and charts help to show where the staff felt they were adequate and where the greatest need for improvement lied. The conclusions acquired by that data, along with the observations of the staff and horses by outside equine professionals, will help determine where additional focus in their training might help them to improve.

The Questions/Statements

Question 1. *Ride camp horses outside of a camp setting.* The question of how important it is to ride camp horses outside of a camp setting and their ability to do so was not one of the most important questions. It is definitely something that could be of benefit to the staff but its largest significance is to show how the staff's perspective changed over the summer. They didn't think it was very important presummer and thought they could have should they have wanted to. Postsummer they realized it would have given them some valuable experience; this changed it from being one of the least important areas of focus at a MWDS ranking of 26 to being right in the middle at 15.

Question 2. *Have one set color of tack/equipment.* Question two is another question that was used to spread the importance level out of each question and gauge the

staff's perception of the situation. It didn't change much pre to post summer being one of the areas least important and needing the least improvement.

Question 3. *Identification and knowledge of behavioral modifiers in the environment.* Question three about behavioral modifiers is the first of the "important" questions asked in the survey. This includes things like yellowjackets, deer, another horse spooking, or strange noises, basically anything around the horse or rider that could cause them to act differently. Presummer the staff saw it as quite important and were unsure of their ability. Whereas postsummer the staff still saw it as above average importance but had more confidence in their ability to see and handle it. `

Question 4. *Ride non-camp horse outside of camp timeframe.* This question speaks to having some previous riding experience and an idea about horsemanship beyond what the staff has seen in on the job training. The staff ranked this of a lower importance than the observers and even lower at the end of the summer. This was just one of the ways a discrepancy between the staff's perception of their experience with horses and the observers opinions differed.

Question 5. *Have daily routine for staff.* Both the staff and the observers saw this as a very important aspect of the program but both also saw them as doing a really good job of it already. This opinion caused this question to have a fairly low MWDS ranking. Though at the end of the summer it is noteworthy that the staff thought they needed far more work on it than they did at the first.

Question 6. *Know/used one brand of saddle/tack.* This is one of the questions that both the staff and observers saw as of lesser importance. Though the program uses

multiple brands of tack due to budget issues this really is not a problem or something to focus on at this time.

Question 7. *Personally float horses' teeth.* There are not many equine professionals that can float a horse's teeth. This is usually left to a veterinarian or an equine dentist. This question was not seen as a very important one initially but the responses do show that the staff feel like they do not know much about a horse's teeth, which can be a crucial part of horse husbandry through nutritional needs. Though in the postsummer survey the staff ranked it 8th of the things to focus on it is not a primary concern at this time.

Question 8. *Own a horse of your own.* The question of owning your own horse speaks to experience again but is not one of the focal questions. Neither the staff nor the observers saw this as an area to focus on.

Question 9. *Have daily routine for the horses.* Having a routine for the horses can be very important but both the staff and observers felt the program at ICC already does a fair job of that. Their routine for their horses and staff are areas that they excel at already.

Question 10. *Teach all styles of riding during camp.* This was a question the observers felt the staff did not understand very well. It was not of a high level of importance to begin with but indicates some of the staff's understanding of their capabilities. This was an open ended statement to include many aspects of english, western, natural horsemanship, and much more that most of the staff have not experienced. Though the MWDS rank did not change much by the end of the summer

the staff seemed to realize they had far less ability in this but that it also was not as important as long as they focused on what they were good at.

Question 11. *Know/feed only one brand of feed.* This was last, or near to last, in MWDS ranking for staff and observers pre and post summer. With a high ability and low importance it did not indicate that they were cognizant of an individual horse's dietary needs being more important that uniformity for convenience.

Question 12. *Know the different horse coat colors.* This was another question that ability was not high on but importance was lower as well. This is something that can affect communication and show a general knowledge of horses but was not a concern for the staff or the observers.

Question 13. *Assess placement of each horse within the herd.* This was one of the first questions determined for this survey and an important one on horse behavior and staff awareness. The observers felt that the staff needed to work on this more than the staff did. It was a surprise that the staff did not all rank this as a 5 on the importance scale but that in and of itself speaks to their awareness. They did believe it important but the observers thought their ability ranking optimistic and something they still need to work on.

Question 14. *Ride/work horses every day in a teaching environment.* This is another area that has an effect on experience and familiarity with horses but does not have a very high MWDS ranking due to a fairly close importance vs. ability score. This was not one of the questions thought to be highly important and due to the low rank not an area to focus on at this time.

Question 15. *Express knowledge and understanding of individual horse's tack needs based on terrain and/or activity.* This question is a high priority question. It was a focal point when coming up with the questions and the observers emphasized the importance of it and that the staff's knowledge and understanding may be less than they think and an area that needs work in the future. As can be seen it ranked in the top 5 in MWDS ranking in pre-summer surveys. The post-summer surveys indicate that the staff felt they had become more comfortable with their knowledge and ability but still felt they needed some work.

Question 16. *Identification and knowledge of toxins in the environment.* This was in the top 10 – 15 questions when the questionnaire was set up. The unexpected thing was that it is ranked number one by MWDS of things needing additional attention and training by the staff both pre and post summer survey. The observers felt this was somewhat important but the staff felt this was the most important thing to address in the future.

Question 17. *Have certification in hippotherapy.* Many of the staff were not familiar with hippotherapy to begin with and it is a much higher training level than needed or is likely to be seen at a summer camp program. Though the ability levels are almost the lowest of all the questions the low importance put on this statement gives it a low MWDS ranking. This isn't a focal point for future training.

Question 18. *Match horse and rider personality.* This was absolutely one of the top five in importance according to the observers. The staff did not place it quite as high

and felt confident in their abilities by the end of the summer. This means that though this is an important issue the MWDS ranking does not indicate it as a focal point for now.

Question 19. *Have horses stalled at night.* With the ability to stall the horses at night being so low on the importance scale and high on the ability there is not much need for work on this in the future.

Question 20. *Demonstrate appropriate grooming techniques.* Being able to demonstrate appropriate grooming techniques is of vital importance according to both the observers and the staff. They needed more work on it coming in but felt more confident in their abilities at the end of the summer. Training protocols for many of these issues will depend largely on the number of returning staff and new staff each year.

Question 21. *Assess nutritional need of individual horses.* This was another one of the top 5 most important issues according to observers and staff. According to the MWDS ranking for pre and post summer, this is definitely an area that more training needs to be put into.

Question 22. *Be a certified riding instructor.* The results for this question were a bit puzzling and speak to the staff's perception. The observers did not place a great deal of importance in this area due to their professional standing and experience. The staff placed somewhat more importance on being a certified riding instructor but place their ability fairly high as well causing the MWDS ranking to be low and this to show as of less concern. The interesting aspect is that since none of the staff were certified by a recognized organization, and it is required to have one on staff, a somewhat awkward situation developed from hiring a certified instructor to come in part time. This caused

issues with staff dynamics and was an issue that even the observers felt and commented on. It affected some of the other questions/statements like having a daily routine. It was noted that on three separate occasions the primary water source was allowed to "run dry" for an undetermined period of time due to confusion or dereliction of responsibilities. So though this question had an extremely low MWDS ranking and would normally not be a focal point for future training, at the time observation and comments by the staff would indicate that hierarchy and responsibility between staff is of the utmost concern for future summers.

Question 23. *Assess equine body language in regards to communication.* With both pre and post summer importance out weighing the staff's ability, this shows that the ability to assess equine body language is an area that the staff need to improve on. This also deals directly with addressing indicators before they become serious problems.

Question 24. *Demonstrate situational awareness or the ability to know all that is going on around you.* This was the area that the observers had the most concerns about and felt the staff needed the most improvement in. The staff ranked situational awareness fairly high both pre and post summer. With them ranking their ability lower in post summer survey it shows not so much that their ability went down but that their awareness of a deficiency went up. This is definitely in the top 5 for what needs to be addressed and worked on in the future.

Question 25. *Assess bit and bridle fit.* Being able to assess the fit of the bit and bridle is definitely of a high importance. Though they show a belief of being fairly able

to perform this, the staff still feels a need for improvement. This is not a top 5 concern but is noteworthy for the future.

Question 26. *Accurately assess hydration of equine.* In a hot, humid, and heavy workload environment this cannot be stressed enough for horse health. To be able to accurately assess a horse's hydration status and provide for that need is something the staff and observers ranked as extremely important. Both pre and post summer surveys indicate a strong need for improvement in this area. As stated earlier and going along with situational awareness, there were a number of times the primary water source was allowed to run dry and the horses went without for an undetermined amount of time. This is definitely an area of focus for future training.

Question 27. *Assess human body language and how it affects equine behavior*. The MWDS for this question is medial as far as ranking. Though it is not in the top 5 to focus on, the staff do see a deficiency in ability that needs to be worked on. The observers noted that the staff's lack of confidence and self assurance made a difference in the program and was something that should be worked on.

Question 28. *Distinguish the difference between a fear response and an aggressive response.* The question works in parallel with understanding equine body language. It is of a high level of importance and in a stressful situation can mean all the difference between making things better or making them worse. Though not ranked in the top 5, it is very close and well worth working on in the future. This had a high MWDS rank by both staff and observers.

Question 29. *Assess saddle fit and identify points of pressure and friction.* This question addresses an issue that both the observers and the staff have mentioned causing problems in the past. The rank of importance was almost the highest in pre and post summer surveys. The staff ranked their ability extremely high but it is still something that needs to be looked at in the future.

Question 30. *Distinguish pain response from other behaviors or lack thereof.* This is another question that ranked in the top 5 for future consideration on training. It correlates with many of the other questions but has a very specific focal point that the staff and the observers believed that the staff need more work on.

Focal Points for Future Training

The differences in the pre and post summer surveys show the difference in the the staff's perceptions as they were coming into the job and after a whole summer of being immerced in it. Many of the training considerations for future summers will depend greatly on number of new vs. returning staff as well as other matters such as experience, training, and ability. The top 5 questions for both pre and post summer surveys will be listed as primary focal points for training respectively for new and returning staff members.

Pre-Summer Top 5 Questions According to MWDS Rank

Focal points for new staff:

1. Question 16: Identification and knowledge of toxins in the environment.

Mean importance= 5.00, mean ability= 2.67, MWDS score= 11.67, rank importance= 1, rank ability= 25, rank MWDS= 1

2. Question 30: Distinguish pain response from other behaviors or lack therof.

Mean importance= 4.83, mean ability= 2.83, MWDS score= 9.67, rank importance= 3, rank ability= 22, rank MWDS= 2

3. Question 21: Assess nutritional needs of individual horses.

Mean importance= 5.00, mean ability= 3.17, MWDS score= 9.17, rank importance= 1, rank ability= 16, rank MWDS= 3

4. Question 15: Express knowledge and understanding of individual horse's tack needs based on terrain and/or activity.

Mean importance= 4.67, mean ability= 3.00, MWDS score= 7.78, rank importance= 9, rank ability= 19, rank MWDS= 4

5. Question 26: Accurately assess hydration of equine.

Mean importance= 4.83, mean ability= 3.33, MWDS score= 7.25, rank importance= 3, rank ability= 13, rank MWDS= 5

Post-Summer Top 5 Questions According to MWDS Rank

Focal points for returning staff:

1.) Question 16: Identification and knowledge of toxins in the environment.

Mean importance= 4.80, mean ability= 2.80, MWDS score= 9.60, rank importance= 1, rank ability= 24, rank MWDS= 1

2.) Question 30: Distinguish pain response from other behaviors or lack thereof.

Mean importance= 4.80, mean ability= 3.40, MWDS score= 6.72, rank importance= 1, rank ability= 16, rank MWDS= 2

3.) Question 21: Assess nutritional need of individual horses.

Mean importance= 4.80, mean ability= 3.60, MWDS score= 5.76, rank importance= 1, rank ability= 11, rank MWDS= 3

4.) Question 26: Accurately assess hydration of equine.

Mean importance= 4.80, mean ability= 3.60, MWDS score= 5.76, rank importance= 1, rank ability= 11, rank MWDS= 4

5.) Question 24: Demonstrate situational awareness or the ability to know all that is going on around you.

Mean importance= 4.60, mean ability= 3.40, MWDS score= 5.52, rank importance= 6, rank ability= 16, rank MWDS= 5

Observer/Equine Professional Input

There were a variety of comments and observations from the equine professionals that observed the summer camp staff while they worked with the horses. All of them noted that the staff were good with the children but needed to work on self esteem and confidence in themselves and being able to project that confidence to the students and the

horses. They all also noted that the staff needs to be more aware of their surroundings. The one safety issue that they all commented on was that reins should never be used to tie a horse to a fence or post.

Recommendations for Indian Creek Camp

It would be recommended to have a basic course, or at least a study guide, that all horse staff complete before the start of the summer. The primary questions are ones of nutrition, body language, tack fit, basic horse husbandry, health, and situational awareness. Though more experienced workers would be an asset, the areas the current staff feel they need the most work are basic horse husbandry issues.

Implications

Possible factors for the outcome of the study: age range/maturity of participants/staff members, compliance of members, their need to seem like they know what they are doing. A single facility study does give insight to that facility but if more facilities had been used a more accurate analysis could have been reached. A facility with a more experienced barn director would potentially score the survey differently.

Recommendations for Future Research

This study has shown some of the pros and cons of an MWDS survey based on one facility. In the future, if a far larger number of facilities were used a more thorough database could be formed with outliers and compliance playing less of an issue. Compliance was a big issue during data collection. Setting a time for all study participants to complete forms or interviews at a specific time would make it much

easier. The surveys were handed out and participants were asked to turn them back in at a specific time. This was a mistake. A larger number of questions and a section for participant comments may be advantageous as well. Many of the observers preferred to give their thoughts in comment form and did not feel comfortable ranking based off individual questions. They also may have been distracted by primarily watching during riding lessons and were impressed with staff student interaction and were not as focused on staff horse interaction. More time should have been spent observing the staff grooming, tacking, doing groundwork, and riding with no students around.

Conclusions

The template for this study deals with small facility lesson horses. This can correlate to the vast majority of these programs all over the US that utilized fairly inexperienced and young workers. They are often not heavily funded or have much extra time for training or to build experience. Typically, by the time a staff member gains experience they move on to a higher paying or more stable job. In the instance of Indian Creek Camp, they tend to hire from a pool of Seventh Day Adventist highschool and college students. This can be severely limiting in availability of experienced equine professionals. The information gleaned from studies like this can best be used if it is kept in mind that a fairly young and inexperienced workforce with a high turnover rate will be the primary recipients. Typically, the person doing the hiring is somewhat older but does not have a great deal of equine experience either. This is true for other church and youth camps, boyscouts, 4-H, and many other small facilities. For the horses to get the best care and understanding a fairly economical and time efficient training plan needs to be in

place to help raise knowledge and ability in crucial areas. Most will try to have at least one more experienced horse worker in charge to teach the others.

This survey has shown us some areas that the 2017 summer camp staff have seen a need for improvement. This will help with their training at the beginning of the summer and hopefully help them provide better care for the horses they work with. Some of the horses in the study have been at ICC for 15 or more years and the average worker may only work in the barn for a year or two. The psychological strain of so many different workers and campers can cause serious issues with these horses. By finding the areas the staff need more work on, hopefully, it can be a safer and more productive teaching and work environment for the horses and the people.

Appendices

Appendix A

Survey Instrument

Importance					Your Ability				
1 Very Unimportant	2 Unimportant	3 Neutral	4 Important	5 Very Important	1 Very Unable	2 Unable	3 Neutral	4 Able	5 Very Able

1 2 3 4 5	1) Ride camp horses outside of camp setting.	1 2 3 4 5
1 2 3 4 5	2) Have one set color of tack/equipment.	1 2 3 4 5
1 2 3 4 5	3) Identification and knowledge of behavioral modifiers in the environment.	1 2 3 4 5
1 2 3 4 5	4) Ride non-camp horse outside of camp timeframe.	1 2 3 4 5
1 2 3 4 5	5) Have daily routine for staff.	1 2 3 4 5
1 2 3 4 5	6) Know/used one brand of saddle/tack.	1 2 3 4 5
1 2 3 4 5	7) Personally float horses' teeth.	1 2 3 4 5
1 2 3 4 5	8) Own a horse of your own.	1 2 3 4 5
1 2 3 4 5	9) Have daily routine for the horses.	1 2 3 4 5
1 2 3 4 5	10) Teach all styles of riding during camp.	1 2 3 4 5
1 2 3 4 5	11) Know/feed only one brand of feed.	1 2 3 4 5
1 2 3 4 5	12) Know the different horse coat colors.	1 2 3 4 5
1 2 3 4 5	13) Assess placement of each horse within the heard.	1 2 3 4 5
1 2 3 4 5	14) Ride/work horses every day in a teaching environment.	1 2 3 4 5
1 2 3 4 5	15) Express knowledge and understanding of individual horse's tack needs based on terrain and/or activity.	1 2 3 4 5
1 2 3 4 5	16) Identification and knowledge of toxins in the environment.	1 2 3 4 5
1 2 3 4 5	17) Have certification in hippotherapy.	1 2 3 4 5
1 2 3 4 5	18) Match horse and rider personality.	1 2 3 4 5
1 2 3 4 5	19) Have Horses stalled at night.	1 2 3 4 5
1 2 3 4 5	20) Demonstrate appropriate grooming techniques.	1 2 3 4 5
1 2 3 4 5	21) Assess nutritional need of individual horses.	1 2 3 4 5
1 2 3 4 5	22) Be a certified riding instructor.	1 2 3 4 5
1 2 3 4 5	23) Assess equine body language in regards to communication.	1 2 3 4 5
1 2 3 4 5	24) Demonstrate situational awareness or the ability to know all that is going on around you.	1 2 3 4 5
1 2 3 4 5	25) Assess bit and bridle fit.	1 2 3 4 5
1 2 3 4 5	26) Accurately assess hydration of equine.	1 2 3 4 5
1 2 3 4 5	27) Assess human body language and how it affects equine behavior.	1 2 3 4 5
1 2 3 4 5	28) Distinguish the difference between a fear response and an aggressive response.	1 2 3 4 5
1 2 3 4 5	29) Assess saddle fit and identify points of pressure and friction.	1 2 3 4 5
1 2 3 4 5	30) Distinguish pain response from other behaviors or lack thereof.	1 2 3 4 5

Appendix B

Pre-summer Importance Frequency/Percent

Importance						
		VU	U	N	I	VI
n		*f (%)*	*f (%)*	*f (%)*	*f (%)*	*f (%)*
1	6	1(3.3)	0(0.0)	2(6.7)	2(6.7)	1(3.3)
2	6	2(6.7)	3(10.0)	1(3.3)	0(0.0)	0(0.0)
3	6	0(0.0)	0(0.0)	0(0.0)	2(6.7)	4(13.3)
4	6	0(0.0)	0(0.0)	2(6.7)	2(6.7)	2(6.7)
5	6	0(0.0)	0(0.0)	0(0.0)	3(10.0)	3(10.0)
6	6	1(3.3)	4(13.3)	1(3.3)	0(0.0)	0(0.0)
7	6	1(3.3)	0(0.0)	4(13.3)	1(3.3)	0(0.0)
8	6	2(6.7)	0(0.0)	2(6.7)	2(6.7)	0(0.0)
9	6	0(0.0)	0(0.0)	0(0.0)	5(16.7)	1(3.3)
10	6	0(0.0)	1(3.3)	3(10.0)	0(0.0)	2(6.7)
11	6	1(3.3)	1(3.3)	2(6.7)	1(3.3)	1(3.3)
12	6	1(3.3)	1(3.3)	2(6.7)	2(6.7)	0(0.0)
13	6	0(0.0)	0(0.0)	1(3.3)	2(6.7)	3(10.0)
14	6	0(0.0)	0(0.0)	1(3.3)	3(10.0)	2(6.7)
15	6	0(0.0)	0(0.0)	0(0.0)	2(6.7)	4(13.3)
16	6	0(0.0)	0(0.0)	0(0.0)	0(0.0)	6(20.0)
17	6	1(3.3)	2(6.7)	2(6.7)	1(3.3)	0(0.0)
18	6	1(3.3)	0(0.0)	1(3.3)	2(6.7)	2(6.7)
19	6	3(10.0)	1(3.3)	2(6.7)	0(0.0)	0(0.0)
20	6	0(0.0)	0(0.0)	0(0.0)	3(10.0)	3(10.0)
21	6	0(0.0)	0(0.0)	0(0.0)	0(0.0)	6(20.0)
22	6	1(3.3)	0(0.0)	2(6.7)	3(10.0)	0(0.0)
23	6	0(0.0)	0(0.0)	1(3.3)	2(6.7)	3(10.0)
24	6	0(0.0)	0(0.0)	0(0.0)	1(3.3)	5(16.7)
25	6	0(0.0)	0(0.0)	0(0.0)	1(3.3)	5(16.7)
26	6	0(0.0)	0(0.0)	0(0.0)	1(3.3)	5(16.7)
27	6	0(0.0)	0(0.0)	0(0.0)	5(16.7)	1(3.3)
28	6	0(0.0)	0(0.0)	0(0.0)	1(3.3)	5(16.7)
29	6	0(0.0)	0(0.0)	0(0.0)	1(3.3)	5(16.7)
30	6	0(0.0)	0(0.0)	0(0.0)	1(3.3)	5(16.7)

Note. VU=Very Unimportant, U=Unimportant, N=Neutral, I=Important, VI=Very Important

Appendix C

Pre-summer Ability Frequency/Percent

Ability						
		VU	U	N	I	VI
n		*f (%)*	*f (%)*	*f (%)*	*f (%)*	*f (%)*
1	6	0(0.0)	0(0.0)	3(10.0)	2(6.7)	1(3.3)
2	6	0(0.0)	3(10.0)	2(6.7)	0(0.0)	1(3.3)
3	6	0(0.0)	1(3.3)	2(6.7)	3(10.0)	0(0.0)
4	6	0(0.0)	1(3.3)	1(3.3)	4(13.3)	0(0.0)
5	6	0(0.0)	0(0.0)	1(3.3)	2(6.7)	3(10.0)
6	6	1(3.3)	2(6.7)	1(3.3)	2(6.7)	0(0.0)
7	6	3(10.0)	2(6.7)	1(3.3)	0(0.0)	0(0.0)
8	6	2(6.7)	3(10.0)	0(0.0)	0(0.0)	1(3.3)
9	6	0(0.0)	0(0.0)	0(0.0)	4(13.3)	2(6.7)
10	6	1(3.3)	1(3.3)	0(0.0)	4(13.3)	0(0.0)
11	6	0(0.0)	0(0.0)	3(10.0)	2(6.7)	1(3.3)
12	6	0(0.0)	3(10.0)	3(10.0)	0(0.0)	0(0.0)
13	6	1(3.3)	0(0.0)	4(13.3)	1(3.3)	0(0.0)
14	6	0(0.0)	0(0.0)	1(3.3)	5(10.0)	0(0.0)
15	6	1(3.3)	1(3.3)	1(3.3)	3(10.0)	0(0.0)
16	6	0(0.0)	2(6.7)	4(13.3)	0(0.0)	0(0.0)
17	6	5(16.7)	1(3.3)	0(0.0)	0(0.0)	0(0.0)
18	6	0(0.0)	0(0.0)	6(20.0)	0(0.0)	0(0.0)
19	6	0(0.0)	1(3.3)	2(6.7)	2(6.7)	1(3.3)
20	6	0(0.0)	0(0.0)	2(6.7)	3(10.0)	1(3.3)
21	6	0(0.0)	2(6.7)	1(3.3)	3(10.0)	0(0.0)
22	6	0(0.0)	2(6.7)	2(6.7)	1(3.3)	1(3.3)
23	6	0(0.0)	1(3.3)	4(13.3)	1(3.3)	0(0.0)
24	6	0(0.0)	1(3.3)	2(6.7)	2(6.7)	1(3.3)
25	6	0(0.0)	0(0.0)	1(3.3)	5(16.7)	0(0.0)
26	6	0(0.0)	1(3.3)	2(6.7)	3(10.0)	0(0.0)
27	6	0(0.0)	1(3.3)	2(6.7)	3(10.0)	0(0.0)
28	6	0(0.0)	0(0.0)	4(13.3)	1(3.3)	1(3.3)
29	6	0(0.0)	0(0.0)	2(6.7)	3(10.0)	1(3.3)
30	6	1(3.3)	1(3.3)	3(10.0)	0(0.0)	1(3.3)

Note. VU=Very Unimportant, U=Unimportant, N=Neutral, I=Important, VI=Very Important

Appendix D

Post-Summer Importance Frequency/Percent

Importance						
		VU	U	N	I	VI
n		*f (%)*	*f (%)*	*f (%)*	*f (%)*	*f (%)*
1	6	0(0.0)	0(0.0)	3(10.0)	1(3.3)	1(3.3)
2	6	1(3.3)	4(13.3)	0(0.0)	0(0.0)	0(0.0)
3	6	0(0.0)	0(0.0)	1(3.3)	2(6.7)	2(6.7)
4	6	0(0.0)	0(0.0)	1(3.3)	3(10.0)	0(0.0)
5	6	0(0.0)	0(0.0)	0(0.0)	3(10.0)	2(6.7)
6	6	0(0.0)	4(13.3)	1(3.3)	0(0.0)	0(0.0)
7	6	2(6.7)	0(0.0)	1(3.3)	1(3.3)	1(3.3)
8	6	1(3.3)	0(0.0)	2(6.7)	2(6.7)	0(0.0)
9	6	0(0.0)	0(0.0)	0(0.0)	3(10.0)	2(6.7)
10	6	0(0.0)	1(3.3)	4(13.3)	0(0.0)	0(0.0)
11	6	1(3.3)	1(3.3)	3(10.0)	0(0.0)	0(0.0)
12	6	0(0.0)	3(10.0)	2(6.7)	0(0.0)	0(0.0)
13	6	0(0.0)	0(0.0)	0(0.0)	3(10.0)	2(6.7)
14	6	0(0.0)	0(0.0)	1(3.3)	3(10.0)	1(3.3)
15	6	0(0.0)	0(0.0)	0(0.0)	2(6.7)	3(10.0)
16	6	0(0.0)	0(0.0)	0(0.0)	1(3.3)	4(13.3)
17	6	0(0.0)	3(10.0)	2(6.7)	0(0.0)	0(0.0)
18	6	1(3.3)	0(0.0)	1(3.3)	1(3.3)	2(6.7)
19	6	3(10.0)	1(3.3)	1(3.3)	0(0.0)	0(0.0)
20	6	0(0.0)	0(0.0)	0(0.0)	4(13.3)	1(3.3)
21	6	0(0.0)	0(0.0)	0(0.0)	1(3.3)	4(13.3)
22	6	0(0.0)	1(3.3)	1(3.3)	2(6.7)	1(3.3)
23	6	0(0.0)	0(0.0)	0(0.0)	3(10.0)	2(6.7)
24	6	0(0.0)	0(0.0)	0(0.0)	2(6.7)	3(10.0)
25	6	0(0.0)	0(0.0)	0(0.0)	2(6.7)	3(10.0)
26	6	0(0.0)	0(0.0)	0(0.0)	1(3.3)	4(13.3)
27	6	0(0.0)	0(0.0)	0(0.0)	2(6.7)	3(10.0)
28	6	0(0.0)	0(0.0)	0(0.0)	2(6.7)	3(10.0)
29	6	0(0.0)	0(0.0)	0(0.0)	1(3.3)	4(13.3)
30	6	0(0.0)	0(0.0)	0(0.0)	1(3.3)	4(13.3)

Note. VU=Very Unimportant, U=Unimportant, N=Neutral, I=Important, VI=Very Important

Appendix E

Post-summer Ability Frequency/Percent

Ability						
		VU	U	N	I	VI
n		*f (%)*	*f (%)*	*f (%)*	*f (%)*	*f (%)*
1	6	1(3.3)	1(3.3)	1(3.3)	1(3.3)	1(3.3)
2	6	0(0.0)	1(3.3)	3(10.0)	1(3.3)	0(0.0)
3	6	0(0.0)	0(0.0)	1(3.3)	3(10.0)	1(3.3)
4	6	0(0.0)	1(3.3)	1(3.3)	2(6.7)	0(0.0)
5	6	0(0.0)	0(0.0)	1(3.3)	3(10.0)	1(3.3)
6	6	1(3.3)	2(6.7)	1(3.3)	1(3.3)	0(0.0)
7	6	3(10.0)	2(6.7)	0(0.0)	0(0.0)	0(0.0)
8	6	1(3.3)	2(6.7)	0(0.0)	0(0.0)	2(6.7)
9	6	0(0.0)	0(0.0)	0(0.0)	3(10.0)	2(6.7)
10	6	1(3.3)	2(2.7)	1(3.3)	1(3.3)	0(0.0)
11	6	0(0.0)	0(0.0)	2(2.7)	1(3.3)	2(2.7)
12	6	0(0.0)	3(10.0)	0(0.0)	2(2.7)	0(0.0)
13	6	0(0.0)	0(0.0)	2(2.7)	3(10.0)	0(0.0)
14	6	0(0.0)	1(3.3)	0(0.0)	4(13.3)	0(0.0)
15	6	0(0.0)	0(0.0)	0(0.0)	4(13.3)	0(0.0)
16	6	0(0.0)	1(3.3)	4(13.3)	0(0.0)	0(0.0)
17	6	3(10.0)	2(6.7)	0(0.0)	0(0.0)	0(0.0)
18	6	0(0.0)	0(0.0)	2(6.7)	2(6.7)	1(3.3)
19	6	1(3.3)	1(3.3)	2(6.7)	0(0.0)	1(3.3)
20	6	0(0.0)	0(0.0)	0(0.0)	3(10.0)	2(6.7)
21	6	0(0.0)	0(0.0)	2(6.7)	3(10.0)	0(0.0)
22	6	0(0.0)	2(6.7)	1(3.3)	0(0.0)	2(6.7)
23	6	0(0.0)	1(3.3)	1(3.3)	3(10.0)	0(0.0)
24	6	0(0.0)	0(0.0)	3(10.0)	2(6.7)	0(0.0)
25	6	0(0.0)	0(0.0)	0(0.0)	5(16.7)	0(0.0)
26	6	0(0.0)	0(0.0)	2(6.7)	3(10.0)	0(0.0)
27	6	0(0.0)	0(0.0)	1(3.3)	4(13.3)	0(0.0)
28	6	0(0.0)	0(0.0)	2(6.7)	3(10.0)	0(0.0)
29	6	0(0.0)	0(0.0)	1(3.3)	3(10.0)	1(3.3)
30	6	0(0.0)	0(0.0)	3(10.0)	2(6.7)	0(0.0)

Note. VU=Very Unimportant, U=Unimportant, N=Neutral, I=Important, VI=Very Important

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